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A New Caecilian From Ethiopia

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Two caecilian specimens were sent to the British Museum of Natural History from Ethiopia by Mr. M. J. Largen of the Haile Sellassie I University, Addis Ababa. These in turn have been made available to me for study by Miss Alice G. C. Grandison, Curator of Herpetology at the British Museum.

The first specimen, BMNH No. 1969·1589, was found at Aleku village 12 km N of Dembidollo, Wallega, Ethiopia at an elevation of approximately 1846 m ($34^{\circ} 37'E$; $8^{\circ} 39'N$). The second, BMNH No. 1969·976, was obtained by the Great Abbai Expedition, at Ghimbi, Wallega, Ethiopia at an elevation of approximately 2180 m ($35^{\circ} 50'E$; $9^{\circ} 10'N$). The latter locality is "no more than 125 km (in direct line) NE of Aleku."

These localities are several hundred kilometers north of previously known points that have yielded caecilians on the eastern side of Africa; however, on the western side they have been taken in southern Senegal some 5° farther north than the Ethiopian localities.

The caecilians seemingly belong to a new species of the genus *Geotrypetes*, and it is herewith described:

Geotrypetes grandisonae sp. nov.

(Figs. 1-4)

TYPE. British Museum (Natural History) No. 1969·1589, Aleku, 12 km N Dembidollo, Ethiopia, 1846 m elev. PARATYPE. BMNH, No. 1969·976, Ghimbi Wallega, Ethiopia, 2180 m elev.

DIAGNOSIS. A rather short plump species, reaching a known length of 259 mm. The body width in length approximately 24 times. Eyes visible in a socket not continuous with the tentacular groove. Tentacle distinctly closer to the eye than to the nostril. Primary folds 84-95, complete dorsally but narrowly incomplete on the anterior ventral part of the body. Secondary folds 69-72 with 32-33 complete. Splenial teeth, 3-3 to 5-5. Four to five scale rows in each fold on the last two cm of body. Tongue with two small narial plugs. A diastema between the squamosal bone and the parietal bone.

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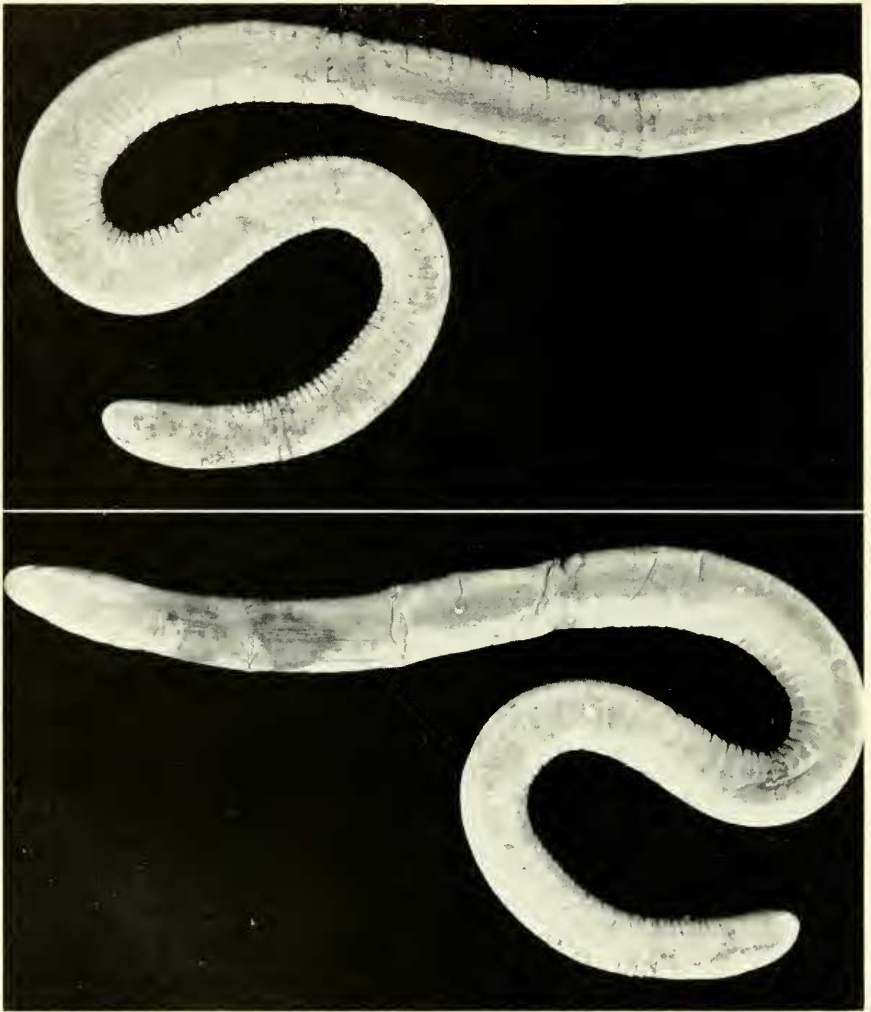


FIG. 1. *Geotrypetes grandisonae* sp. nov. Holotype, (♀ ?) British Museum (Natural History) No. 1969.1589; Aleku, 12 km N Dembidollo, Ethiopia, 1846 m elev. Dorsal (upper) and ventral (lower) views. Actual length, 259 mm.

DESCRIPTIONS OF TYPE. A small, rather thick-bodied species tapering slightly posteriorly, the length 259 mm, the body width 11 mm; body width in length, approximately 23.5 times. Head narrowing somewhat anteriorly, with rounded snout projecting 1.2 mm beyond mouth; length of lower jaw from tip to rictus oris, 8 mm. Eye in socket which is not continuous with the tentacular groove. Tentacle distinctly closer to eye (1.9 mm) than to nostril (2.7 mm). Snout tip to first nuchal groove, 12.4 mm; to 2nd groove, 15.4 mm; to 3rd nuchal groove, 19 mm (lateral measurements). Tentacle about equidistant between edge of lip and a line from eye to nostril, the external opening minute, somewhat horseshoe-shaped, very slightly elevated. The two collars following occiput not very distinct, seemingly somewhat swollen (perhaps due to a small tumor in mouth and throat). The first nuchal groove distinct laterally, vague dorsally and ventrally; a transverse groove vaguely evident on collar; second groove limiting first collar distinct below and on side but very dim or absent dorsally; the third groove rather distinct dorsally and ventrally, except it fuses with the first primary fold for a short distance. Second collar wider than first, with no dorsal transverse groove evident. Primary folds following second collar, 84, complete dorsally throughout but narrowly incomplete ventrally on most of anterior half of body. Secondary folds, 69, of which about 33 are complete.

Scales beginning on primary folds at a point near first secondaries. At midbody, 2 to 3 scale rows, which may not be complete ventrally, in each fold; posteriorly, 4-5 scale rows in each fold, the scales variable in size, the largest 1.2-1.4 mm in greatest width. No subdermal scales found.

Glands in skin visible, but not especially conspicuous. In the grooves the elongate glands are directed forward and downward but are less conspicuous than in many caecilians. No anal glands visible (♀ ?).

Scales not found in the first secondaries. Terminal "shield" very small (3 mm wide). Vent subcircular, the surrounding denticulations elevated (may not be typical).

Dentition. Premaxillary-maxillary series, 19-1-21; prevomeropalatine, 20-1-21; dentary, 17-17; splenial, 5-5. Dentary teeth for the most part larger than maxillaries or premaxillaries and these in turn larger than prevomeropalatines. The splenials equal to or a little smaller than prevomeropalatines.

Measurements in mm. Total length, 259; head width (greatest), 9; body width (middle third), 11; width near vent, 8.5; vent to terminus, 2; width in length, approximately 23.5 times.

Color. The general color is a dull bluish to violet slate nearly uniform above, perhaps somewhat more violet anteriorly. Top and sides of head and chin more grayish, lighter than dorsum. A distinct light spot over and surrounding eye, one at nostril, one at tentacle, and one covering the denticles in

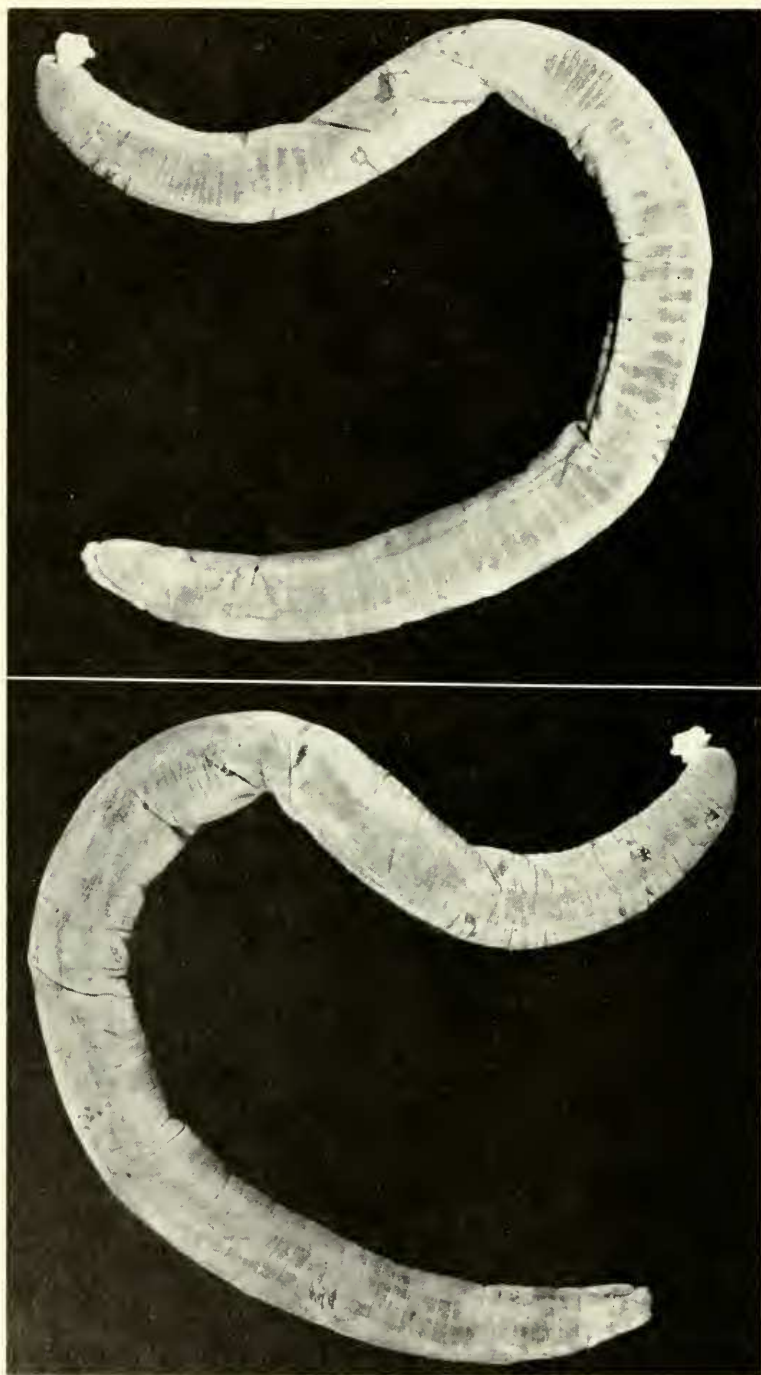


Fig. 2. *Geotrypetes grandisonae* sp. nov. Paratype, ♂, British Museum (Natural History) No. 1969.976; Ghimbi, Wallega, Ethiopia, 2180 m elev. Dorsolateral (left) and ventrolateral (right) views. Actual length, 231 mm.

vent area. Folds on sides have very narrow inconspicuous light edges on anterior part of body.

Remarks. Most of the characters of the skull are unknown. However, there is a diastema between the squamosal and parietal bones and the orbit of the eye is not continuous with the tentacular groove. A tumorous growth is present in the posterior palatal area extending back into the throat. The tongue is swollen as if it too might be affected by the disease. There seems to be only a relatively small passage left for food.

A second specimen (paratype) referred to this species is BMNH No. 1969·976. It offers the following data: primaries, 85; secondaries, 72; complete secondaries 32; premaxillary-maxillary teeth, 20-1-18; prevomeropalatine teeth, 17-1-18; dentary, 15-1-15 (seemingly a median tooth); splenial, 3-3. Measurements in mm are: length, 231 ♀; head width, 7.9; body width, 11.2; tentacle to nostril, 2.1; tentacle to eye, 1.7.

The specimen has much the same general color as the type save that the anterior section of the body is darker in places probably due to air exposure and slight dehydration. The penis is partially extended. The collars are very clearly delineated, the second seemingly not fusing below with the first primary fold.

While the two specimens appear to agree in most easily observable characters, there seems to be variation in the secondaries and in scales. I cannot find any scales in the first few secondaries; elongate skin glands are present bordering the folds above, filled with a white cheeselike material. These glands also appear in the primary folds in the same region but here there may be a few scales. Posteriorly, scales appear in both primary and secondary folds, and are similar to those in the type.

On the external surface one may discern certain larger skin glands that may be diseased or possibly the result of parasitism. These contain much cheeselike material. Occasionally some are seen in which the cheeselike material appears to have shrunk leaving a round shallow depression on the surface above it.

The placing of this species in *Geotrypetes* is tentative. It would appear to agree more closely to this than to other African genera. It differs specifically, however, from other known species of this genus in the number of scale rows in the posterior folds, and in that it has fewer splenial teeth, fewer primary folds and a larger number of secondary folds, many of which are complete, and the tentacular aperture is distinctly closer to the eye than to the nostril. Usually the aperture maintains a fixed position within a genus with relation to the eye and nostril.

The species is named for Miss Alice G. C. Grandison who has been helpful in providing these specimens for study.



FIG. 3. *Geotrypetes grandisonae* sp. nov. Terminal view of the partially extruded penis of No. 1969.976, paratype.



FIG. 4. *Geotrypetes grandisonae* sp. nov. Holotype, British Museum (Natural History) No. 1969.1589. X-ray showing 87 vertebrae and relatively long ribs. Total length 259 mm.